

SEQUENCE LISTING

<110> Japan Science and Technology Agency

<120> Probe for detection of nuclear receptor agonist/antagonist and method for screening agonist and antagonist using the same

<130> 04F055PCT

<150> JP 2004-35678

<151> 2004-02-12

<160> 11

<170> PatentIn version 3.1

<210> 1

<211> 5

<212> PRT

<213> Unknown

<220>

<223> any amino acid

<220>

<221> MISC_FEATURE

<222> (2).. (3)

<223> any amino acid

<400> 1

Leu Xaa Xaa Leu Leu

1 5

<210> 2

<211> 11

<212> PRT

<213> Homo sapiens

<300>

<308> GeneBank/NP_671766

<309> 2003-12-22

<313> (687).. (697)

<400> 2

His Lys Ile Leu His Arg Leu Leu Gln Glu Gly
1 5 10

<210> 3

<211> 239

<212> PRT

<213> Artificial

<220>

<223> synthesized polypeptide

<300>

<308> GeneBank/GAG11884

<309> 2003-05-21

<313> (1).. (238)

<400> 3

Met Val Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu
1 5 10 15

Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly
20 25 30

Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile
35 40 45

Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr
50 55 60

Leu Thr Trp Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys
65 70 75 80

Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu
85 90 95

Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu
100 105 110

Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly
115 120 125

Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr
130 135 140

Asn Tyr Ile Ser His Asn Val Tyr Ile Thr Ala Asp Lys Gln Lys Asn
145 150 155 160

Gly Ile Lys Ala Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser
165 170 175

Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly
180 185 190

Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Tyr Gln Ser Ala Leu
195 200 205

Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe
210 215 220

Val Thr Ala Ala Gly Ile Thr Leu Gly Met Asp Glu Leu Tyr Lys
225 230 235

<210> 4
<211> 248
<212> PRT
<213> unknown

<220>
<223> Artificial Sequence

<300>

<308> GeneBank/AAQ93355

<309> 2003-10-12

<313> (1).. (238)

<400> 4

Met Val Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu
1 5 10 15

Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly
20 25 30

Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile
35 40 45

Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr
50 55 60

Phe Gly Tyr Gly Leu Gln Cys Phe Ala Arg Tyr Pro Asp His Met Lys
65 70 75 80

Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu
85 90 95

Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu
100 105 110

Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly
115 120 125

Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr
130 135 140

Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn
145 150 155 160

Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser
165 170 175

Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly
180 185 190

Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Tyr Gln Ser Ala Leu
195 200 205

Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe
210 215 220

Val Thr Ala Ala Gly Ile Thr Leu Gly Met Asp Glu Leu Tyr Lys Ser
225 230 235 240

Gly Leu Arg Ser Thr Gly Ser Arg
245

<210> 5

<211> 246

<212> PRT

<213> Homo sapiens

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<223> part of a eucaryotic protein

<300>

<308> GeneBank/NP_036821

<309> 2004-01-23

<313> (305).. (550)

<400> 5

His Thr Lys Lys Asn Ser Pro Ala Leu Ser Leu Thr Ala Asp Gln Met
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Val Ser Ala Leu Leu Asp Ala Glu Pro Pro Leu Ile Tyr Ser Glu Tyr
20 25 30

Asp Pro Ser Arg Pro Phe Ser Glu Ala Ser Met Met Gly Leu Leu Thr
35 40 45

Asn Leu Ala Asp Arg Glu Leu Val His Met Ile Asn Trp Ala Lys Arg
50 55 60

Val Pro Gly Phe Gly Asp Leu Asn Leu His Asp Gln Val His Leu Leu
65 70 75 80

Glu Cys Ala Trp Leu Glu Ile Leu Met Ile Gly Leu Val Trp Arg Ser
85 90 95

Met Glu His Pro Gly Lys Leu Leu Phe Ala Pro Asn Leu Leu Leu Asp
100 105 110

Arg Asn Gln Gly Lys Cys Val Glu Gly Met Val Glu Ile Phe Asp Met
115 120 125

Leu Leu Ala Thr Ser Ser Arg Phe Arg Met Met Asn Leu Gln Gly Glu
130 135 140

Glu Phe Val Cys Leu Lys Ser Ile Ile Leu Leu Asn Ser Gly Val Tyr
145 150 155 160

Thr Phe Leu Ser Ser Thr Leu Lys Ser Leu Glu Glu Lys Asp His Ile
165 170 175

His Arg Val Leu Asp Lys Ile Asn Asp Thr Leu Ile His Leu Met Ala
180 185 190

Lys Ala Gly Leu Thr Leu Gln Gln Gln His Arg Arg Leu Ala Gln Leu

195

200

205

Leu Leu Ile Leu Ser His Ile Arg His Met Ser Asn Lys Gly Met Glu
 210 215 220

His Leu Tyr Asn Met Lys Cys Lys Asn Val Val Pro Leu Tyr Asp Leu
 225 230 235 240

Leu Leu Glu Met Leu Asp
 245

<210> 6

<211> 5

<212> PRT

<213> Artificial

<220>

<223> synthesized oligopeptide

<400> 6

Gly Gly Asn Gly Gly
 1 5

<210> 7

<211> 11

<212> PRT

<213> Artificial

<220>

<223> synthesized oligopeptide

<400> 7

His Lys Ile Ala His Arg Ala Ala Gln Glu Gly
 1 5 10

<210> 8

<211> 271

<212> PRT

<213> Homo sapiens

<220>

<223> part of a eucaryotic protein

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<308> GenBank/NM_015869

<309> 1996-11-04

<313> (235).. (505)

<400> 8

Glu Ser Ala Asp Leu Arg Ala Leu Ala Lys His Leu Tyr Asp Ser Tyr
1 5 10 15

Ile Lys Ser Phe Pro Leu Thr Lys Ala Lys Ala Arg Ala Ile Leu Thr
20 25 30

Gly Lys Thr Thr Asp Lys Ser Pro Phe Val Ile Tyr Asp Met Asn Ser
35 40 45

Leu Met Met Gly Glu Asp Lys Ile Lys Phe Lys His Ile Thr Pro Leu
50 55 60

Gln Glu Gln Ser Lys Glu Val Ala Ile Arg Ile Phe Gln Gly Cys Gln
65 70 75 80

Phe Arg Ser Val Glu Ala Val Gln Glu Ile Thr Glu Tyr Ala Lys Ser
85 90 95

Ile Pro Gly Phe Val Asn Leu Asp Leu Asn Asp Gln Val Thr Leu Leu
100 105 110

Lys Tyr Gly Val His Glu Ile Ile Tyr Thr Met Leu Ala Ser Leu Met
115 120 125

Asn Lys Asp Gly Val Leu Ile Ser Glu Gly Gln Gly Phe Met Thr Arg
 130 135 140

Glu Phe Leu Lys Ser Leu Arg Lys Pro Phe Gly Asp Phe Met Glu Pro
 145 150 155 160

Lys Phe Glu Phe Ala Val Lys Phe Asn Ala Leu Glu Leu Asp Asp Ser
 165 170 175

Asp Leu Ala Ile Phe Ile Ala Val Ile Ile Leu Ser Gly Asp Arg Pro
 180 185 190

Gly Leu Leu Asn Val Lys Pro Ile Glu Asp Ile Gln Asp Asn Leu Leu
 195 200 205

Gln Ala Leu Glu Leu Gln Leu Lys Leu Asn His Pro Glu Ser Ser Gln
 210 215 220

Leu Phe Ala Lys Leu Leu Gln Lys Met Thr Asp Leu Arg Gln Ile Val
 225 230 235 240

Thr Glu His Val Gln Leu Leu Gln Val Ile Lys Lys Thr Glu Thr Asp
 245 250 255

Met Ser Leu His Pro Leu Leu Gln Glu Ile Tyr Lys Asp Leu Tyr
 260 265 270

<210> 9

<211> 30

<212> PRT

<213> Artificial

<220>

<223> synthesized oligopeptide

<400> 9

Gly Gly Asn Gly Gly Gly Gly Asn Gly Gly Gly Gly Asn Gly Gly Gly
 1 5 10 15

Gly Asn Gly Gly Gly Gly Asn Gly Gly Gly Gly Asn Gly Gly
 20 25 30

<210> 10
 <211> 239
 <212> PRT
 <213> Homo sapiens

<220>
 <223> part of a eucaryotic protein

<300>
 <308> GenBank/M23263
 <309> 2002-02-11
 <313> (672).. (910)

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Phe Leu Asn Val Leu Glu Ala Ile Glu Pro Gly Val Val Cys Ala Gly
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His Asp Asn Asn Gln Pro Asp Ser Phe Ala Ala Leu Leu Ser Ser Leu
 20 25 30

Asn Glu Leu Gly Glu Arg Gln Leu Val His Val Val Lys Trp Ala Lys
 35 40 45

Ala Leu Pro Gly Phe Arg Asn Leu His Val Asp Asp Gln Met Ala Val
 50 55 60

Ile Gln Tyr Ser Trp Met Gly Leu Met Val Phe Ala Met Gly Trp Arg
 65 70 75 80

Ser Phe Thr Asn Val Asn Ser Arg Met Leu Tyr Phe Ala Pro Asp Leu
 85 90 95

Val Phe Asn Glu Tyr Arg Met His Lys Ser Arg Met Tyr Ser Gln Cys
100 105 110

Val Arg Met Arg His Leu Ser Gln Glu Phe Gly Trp Leu Gln Ile Thr
115 120 125

Pro Gln Glu Phe Leu Cys Met Lys Ala Leu Leu Leu Phe Ser Ile Ile
130 135 140

Pro Val Asp Gly Leu Lys Asn Gln Lys Phe Phe Asp Glu Leu Arg Met
145 150 155 160

Asn Tyr Ile Lys Glu Leu Asp Arg Ile Ile Ala Cys Lys Arg Lys Asn
165 170 175

Pro Thr Ser Cys Ser Arg Arg Phe Tyr Gln Leu Thr Lys Leu Leu Asp
180 185 190

Ser Val Gln Pro Ile Ala Arg Glu Leu His Gln Phe Thr Phe Asp Leu
195 200 205

Leu Ile Lys Ser His Met Val Ser Val Asp Phe Pro Glu Met Met Ala
210 215 220

Glu Ile Ile Ser Val Gln Val Pro Lys Ile Leu Ser Gly Lys Val
225 230 235

<210> 11

<211> 15

<212> PRT

<213> Artificial

<220>

<223> synthesized oligopeptide

<400> 11

Gly Gly Asn Gly Gly Gly Gly Asn Gly Gly Gly Gly Asn Gly Gly
1 5 10 15